Amendments to the Claims:

This listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-33 (Canceled)

34. (Currently Amended) A process for producing a silane-crosslinked thermoplastic polyolefin comprising:

a. providing a mixture of:

(i) at least one silane possessing an unsaturated organic function;

(ii) at least two free radical initiators, the first initiator having a first 0.1 hour half-life temperature and the second initiator having a second 0.1 hour half-life temperature being between 30° and 90°C higher than said first half-life temperature;

(iii) at least one thermoplastic polyolefin wherein the thermoplastic polyolefin is at least one polyolefin selected from the group consisting of high-pressure low-density polyethylene, medium/low-pressure high-density polyethylene, low-pressure low-density polyethylene, medium-density polyethylene, an ethylene-α-olefin copolymer, polypropylene, an ethylene-ethyl acrylate copolymer, an ethylene-vinyl acetate copolymer, an ethylene-propylene copolymer, an ethylene-propylene-diene terpolymer, an ethylene-butene copolymer, polymethyl-pentene-1, polybutene, chlorinated polyethylene, an ethylene-vinyl acetate-chlorine terpolymer, and mixtures thereof; and,

b. reacting the mixture of step (a) under reactive mechanical-working conditions and exposure to moisture to provide crosslinked polyolefin.

35. (Currently Amended) The process of Claim 34 wherein the silane possesses the general formula $RR'SiY_2$ wherein R represents a monovalently olefinically unsaturated hydrocarbon, each Y represents a hydrolysable organic radical and R' represents an R radical or a Y radical.

36. (Previously Presented) The process of Claim 35 wherein the silane is vinyl triethoxysilane and/or vinyl trimethoxysilane.

37. (Previously Presented) The process of Claim 34 wherein the 0.1 hour half-life temperatures of the first free radical initiator is from about 80° to about 160°C.

38. (Previously Presented) The process of Claim 34 wherein the 0.1 hour half-life temperature of the second free radical initiator is from about 125° to about 190°C.

39. (Previously Presented) The process of Claim 34 wherein the first free radical initiator is selected from the group consisting of di(2,4-dichlorobenzoyl) peroxide, tert-butyl peroxypivalate, dilauroyl peroxide, dibenzoyl peroxide, tert-butyl peroxy-2-ethylhexanoate, 1,1-di(tert-butylperoxy)-3,3,5-trimethylcyclohexane, di(tert-butylperoxy)cyclohexane, tert-butyl peroxy-3,5,5-trimethylhexanoate, tert-butyl peroxyacetate, tert-butyl peroxybenzoate, di-tert-amyl peroxide, dicumyl peroxide, di(tert-butylperoxyisopropyl)benzene and 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane.

40. (Previously Presented) The process of Claim 34 wherein the second free radical initiator is selected from the group consisting of tert-butyl peroxyacetate, tert-butyl peroxybenzoate, di-tert-amyl peroxide, dicumyl peroxide, di(tert-butylperoxyisopropyl)benzene, 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane, tert-butyl cumyl peroxide, 2,5-dimethyl-2,5-di(tert-butylperoxy)hexyne-3 and di-tert-butyl peroxide.

41. (Previously Presented) The process of Claim 34 wherein mixture (a) further includes at least one additional component selected from the group consisting of catalysts, stabilizers, fillers, antioxidants, processing aids, oils, plasticizers, pigments and lubricants.

42. (Previously Presented) The process of Claim 41 where catalyst is a metal carboxylate, an organic metal compound, an organic base, or an acid.

43. (Currently Amended) A process for producing a silane-crosslinked thermoplastic polyolefin comprising:

a. providing a mixture of:

(i) at least one silane possessing an unsaturated organic function, wherein the silane is vinyl triethoxysilane and/or vinyl trimethoxysilane;

(ii) at least two free radical initiators, the first initiator having a first 0.1 hour half-life temperature and the second initiator having a second 0.1 hour half-life temperature being

between 30° and 90°C higher than said first half-life temperature;

(iii) at least one thermoplastic polyolefin; and,

b. reacting the mixture of step (a) under reactive mechanical-working conditions and exposure to moisture to provide crosslinked polyolefin.

44. (Previously Presented) The process of Claim 43 wherein the thermoplastic polyolefin is at least one polyolefin selected from the group consisting of high-pressure low-density polyethylene, medium/low-pressure high-density polyethylene, low-pressure low-density polyethylene, medium-density polyethylene, an ethylene-α-olefin copolymer, polypropylene, an ethylene-ethyl acrylate copolymer, an ethylene-vinyl acetate copolymer, an ethylene-propylene copolymer, an ethylene-propylene-diene terpolymer, an ethylene-butene copolymer, polymethyl-pentene-1, polybutene, chlorinated polyethylene, an ethylene-vinyl acetate-chlorine terpolymer, and mixtures thereof.

45. (Previously Presented) The process of Claim 43 wherein the 0.1 hour half-life temperatures of the first free radical initiator is from about 80° to about 160°C.

46. (Previously Presented) The process of Claim 43 wherein the 0.1 hour half-life temperature of the second free radical initiator is from about 125° to about 190°C.

47. (Previously Presented) The process of Claim 43 wherein the first free radical initiator is selected from the group consisting of di(2,4-dichlorobenzoyl) peroxide,

tert-butyl peroxypivalate, dilauroyl peroxide, dibenzoyl peroxide, tert-butyl peroxy-2-ethylhexanoate, 1,1-di(tert-butylperoxy)-3,3,5-trimethylcyclohexane, di(tert-butylperoxy)cyclohexane, tert-butyl peroxy-3,5,5-trimethylhexanoate, tert-butyl peroxyacetate, tert-butyl peroxybenzoate, di-tert-amyl peroxide, dicumyl peroxide, di(tert-butylperoxyisopropyl)benzene and 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane.

48. (Previously Presented) The process of Claim 43 wherein the second free radical initiator is selected from the group consisting of tert-butyl peroxyacetate, tert-butyl peroxybenzoate, di-tert-amyl peroxide, dicumyl peroxide, di(tert-butylperoxyisopropyl)benzene, 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane, tert-butyl cumyl peroxide, 2,5-dimethyl-2,5-di(tert-butylperoxy)hexyne-3 and di-tert-butyl peroxide.

49. (Previously Presented) The process of Claim 43 wherein mixture (a) further includes at least one additional component selected from the group consisting of catalysts, stabilizers, fillers, antioxidants, processing aids, oils, plasticizers, pigments and lubricants.

50. (Previously Presented) The process of Claim 49 where catalyst is a metal carboxylate, an organic metal compound, an organic base, or an acid.